

Editorial

SIMON STODDART & CAROLINE MALONE

‘You must begin to extricate yourself from the media if you are going to exist as a respectable archaeologist’ was the advice given to one editor of this journal, GLYN DANIEL, by his fellow academics (Taylor, this issue, p. 471). ‘In the world today, you have no chance if you keep silent’ is the advice of a recent guide to media relations (Macnamara 1995: xv). Glyn Daniel took the advice of the media guide some 40 years ahead of his time. Today there is no longer the same level of disapproval of archaeological exposure to the media. Nevertheless, new tensions have replaced the old in the relationship between the media and archaeology. Archaeology has been remarkably successful since at least the time of Daniel in realizing the importance of publicity, and yet . . . archaeologists are ready to complain about certain media tendencies. In the world beyond archaeology, many individuals created by the media have discovered, to their cost, that they can also be negatively affected by the very media that made them. Archaeology has to live in that same media-conscious world. Above all, since many archaeologists are paid indirectly or directly by the state, we have an obligation to convey our knowledge and enthusiasm to the tax-paying public.

All archaeologists have their media stories. Unfairly, we tend to remember the outrages and the mistakes rather than the smooth successes. One of the present editors was treated to a whole column on the local page of a prominent Italian newspaper on how with a ‘*carabinieri*-like manoeuvre’ he had placed his slow Sherpa van into a parking space ahead of a ‘*giornalist*’. The ‘*giornalist*’ neglected to mention not only that the van was going around the square the right way (in contrast to the car of the ‘*giornalist*’), but also neglected to cover the archaeology at the press conference, preferring the immediate copy offered in the square outside, adding his personal view of the local government administration. Admittedly, he may not have parked his car in time for the press conference. Another journalist redistributed all the periods of an Umbrian landscape from the Palaeo-

lithic to the Medieval onto a single hilltop. A respected British newspaper almost caused a diplomatic incident with a headline along the lines of ‘British Navy rescues Maltese Ancestors’ after it was revealed that the present editors had persuaded the Royal Yacht Britannia to carry precious human remains from Malta for study in the United Kingdom. More recently, another distinguished British newspaper preferred to carry an extensive full-colour story on the sponsor of the project rather than the archaeology itself. Finally, a journalist from a *serious* tabloid (that is, the more serious end of the popular press) was more interested in the fact that Cambridge and Oxford universities were working together than in the aims of the archaeological project. We could relay many successful and accurate examples of coverage of archaeology, but these stories of deviation from the real archaeology, either through simple error or through the sidelining of the archaeological facts in search of a good alternative and usually creative story, remain more prominently in our minds.

At a more general level, the media are keen on a good story (disputes/debates/disagreements) and the tangible value of objects. The story will frequently be enhanced. As BRIAN FAGAN puts it, ‘We have to understand that journalists are always looking for the BIG story, the next Tutankhamun, and they will often think a story is bigger than it is. This is why the more experienced of them are cautious about exploring new discoveries, for they are well aware that many finds are hyped both by such journals as *Nature* and *Science*, which have discovered the value of publicity to sell their journals, and, more importantly, by institutional public relations departments, which are in the business of hyping discoveries to encourage more extramural funding and research grants. Then there is another factor — archaeologists who seek headlines for their discoveries. Visibility seems to be a way of getting ahead, and newspapers and the Web are a good way of finding it. This, and the ghastly publish-or-perish syndrome, have resulted in many grossly over-

publicized finds in recent years, some of which are claimed to be changing the course of human history, when they are mere dots on the tops of archaeological “I”s. In truth, there are relatively few archaeological stories that merit international, or even national coverage — most contact with media is with local outlets, which are interested in far less galactic discoveries. Such coverage is both challenging and important, especially if one can give well-timed publicity to a cooperative landowner or corporation. Here, the same rules apply. Well placed local coverage can be invaluable.’

Sensationalism is an accusation levied against the media. A current dispute which can be read in the pages of *British Archaeology* and ANTIQUITY is over the role of cannibalism. In television, it is easy to present one side of an argument without a measured response from opposing views. In the opinion of Dr PAUL BAHN, the TV series *Cannibal* is one such example (not to speak of *Gladiator Girl* from London on Channel 4), where Dr TIMOTHY TAYLOR was the academic consultant (<http://www.brad.ac.uk/admin/pr/pressreleases/cannibal.htm>). In Bahn’s view, the archaeological evidence for cannibalism is ambiguous, and the interpretation of ancient authors such as Herodotus needs to be approached with even greater caution than that applied to modern ethnography. Taylor (incidentally the son of our television-producer author below) is an example of a less cautious academic with a personal rapport for Herodotus. Bahn contrasts his approach (‘It is quite clear that the edibility of human beings has led in a systematic way to their being eaten on every continent in nearly every period of human existence’ — Taylor 2001: 12) with the more cautious academic approach of Dr HEIDI PETER-ROCHER which, according to Bahn, provides a ‘profound and damning re-analysis of archaeological and ethnohistoric examples of supposed cannibalism’. He also claims that Dr Tim Taylor selectively interprets Mallory & Murphy’s article in ANTIQUITY on Herodotus’ account of funerary cannibalism among the Massagetae, claiming support for cannibalism rather than their conclusion that the bodies were merely defleshed for manageable packaged transport. On the whole issue of cannibalism, we stand back from this debate, suggesting that the truth lies somewhere in between: from the media point of view, an unexciting balanced compromise. However,

on the specific issue of the Massagetae, there does seem to be a disjuncture between ‘Even Herodotus’ man-eaters find archaeological support as Jim Mallory and EM Murphy of the University of Belfast have shown’ (Taylor 2001: 12) and ‘The palaeopathological analysis . . . revealed that . . . the bodies . . . were deliberately defleshed and disarticulated. . . . This process . . . could easily have been mistaken for evidence of cannibalistic practices by an uninformed foreign onlooker’ (Murphy & Mallory 2000: 394). In an article in the *Independent*, discussing media coverage of early humans, Stringer (2001) remarks sagely that exceptional discoveries (e.g. Jinmium in the pages of ANTIQUITY) receive a level of publicity which is not replicated by press coverage of the slow and steady work which marks their refutation and proper contextualization.

Statistically, the media latches onto particular types of stories. In Brian Fagan’s experience, the favourites in the Americas are: ‘the first Americans, Egyptian pyramids and new discoveries along the Nile, any form of ancient burial, preferably spectacular and royal, South-western pueblos, rock art, the origins of agriculture and any sensational discovery such as Han burials’. Readers can now get a measure of web-presented press coverage by signing up to Explorator to receive by e-mail listings from across the English speaking world (<http://groups.yahoo.com/group/Explorator/messages>). Recent offerings include bodies, cannibalism, monuments and repatriated artefacts, but in many cases you have to view quickly before the coverage goes off-line. Is this not an indication of media interest? ANTIQUITY has generally found that articles on drugs, first colonists, first humans, sensitive ethnographic politics (including Celts!) and treasure lead to the most developed interest.

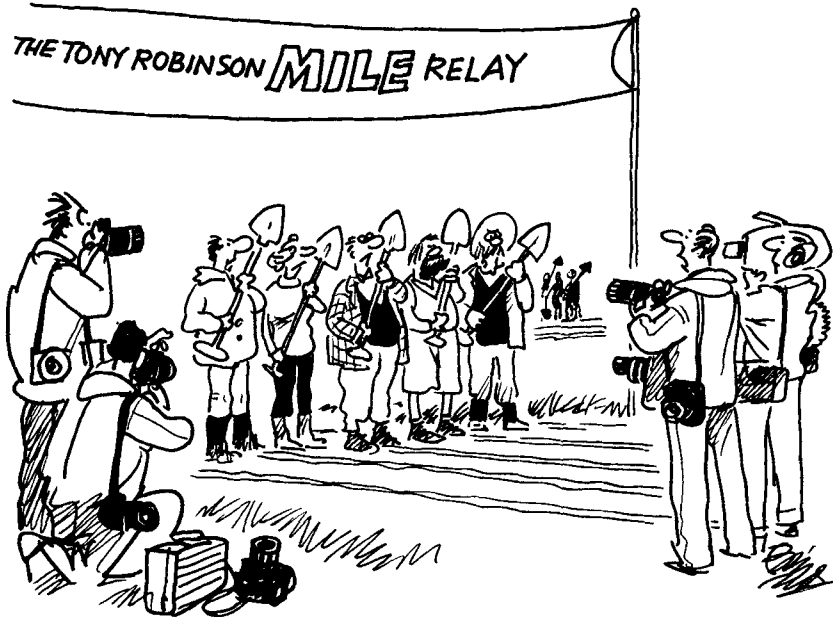
☞ One tendency of the media is to emphasize the *solid and secure* evidence of league tables. Research ratings and Teaching Quality ratings are taken up by the media as secure factual accounts. A recent trend has been the construction of league tables from the most readily available data to construct rival tables. One of the most recent with direct relevance to archaeology has been the *Guardian* ranking of good teaching in UK departments by subject, including archaeology. Since one of the editors is from

a highly ranked department, he is in a good position to note the artificial nature of the exercise, undertaken half-way through yet another ranking of teaching undertaken by the Quality Assurance Agency. Some departments are simply missing: Bradford, Durham, Exeter, Lampeter. Tables can be reconstituted and reconstructed according to the selection and weighting of the variables, and yet because the result can be quantified, it appears so much more certain and verifiable.

☞ The current relationship of the media and archaeology is for us epitomized by the two cartoons BILL TIDY has drawn for us. The first is the archaeologists' impression of the media: the stop-start rush to produce a story. This is not a new phenomenon. *Animal, Vegetable, Mineral*, the Quiz Show of archaeology (and the less remembered, and less politically correct, topic of race), involved, at least in part, the pressure of time. A major difference between the early use of the media by archaeologists, described for us by FORBES TAYLOR below, and the current situation is that archaeologists used to be entrusted with the action. We personally applaud *Time Team* (a popular Channel 4 programme in the UK where a site investigation is solved in a weekend), with the one exception that the central role is given to an actor. Ar-

chaeology is strong enough in its recognition value to have its own personalities. Why not promote an archaeological member of *Time Team*? In 1954 and 1955, the title of Television Personality of the Year was successively awarded to Mortimer Wheeler and Glyn Daniel. The archaeological television personalities of the year 2001 would have a different style, but there is no reason why they should be actors or footballers rather than archaeologists.

The *Times* of London has consistently, for 34 years, employed an ebullient and expansive archaeologist to act as archaeological correspondent. In the first six months of the year 1998, when NORMAN HAMMOND and the *Times* won the Press Award for British archaeology, he attracted 30 other named journalists to write on archaeology for the newspaper, beyond his own contributions. In his career at the *Times* he has sensitized the newspaper 'to the importance of and broad public interest in archaeology, not just tombs-and-temples, but everyday stuff like wetlands, organic remains, etc. There have been highlights — publishing the exposé of the Haçilar fakes in 1971, doing the two articles which stimulated the founding of the IFA a few years later — as well as the daily round.' Here is an archaeologist in charge, even though still potentially subject to the copy editor's and headline writers' incisive intervention after the submission of copy.



'Come on! Smile!'



'Ah, but you're not saying it isn't King Arthur's Round Table!'

The second cartoon represents the media view of the archaeologist. The media wants definite statements of attribution 'to the time of King Arthur'. Most academic archaeologists are unwilling to make such clear statements. Archaeologists are generally cautious in this development of their creativity, although modern tendencies towards narratives in theoretical archaeology may provide an interesting convergence of media and theory.

One key issue is how to handle the media. A standard guide to the media (Macnamara 1996) unravels the formula of drama, detail and relevance which drives the successful media story. This author advises ready access, brevity, simplicity, sincerity and empathy when interviewed. At a more practical level he conveys seven key steps to a mutually successful encounter. Firstly, the interviewee's objectives must be clearly defined in advance. Secondly, the interviewee must consider his audience and not retreat into a standard dialogue with his professional peers (invariably shrouded in jargon). Thirdly, the interviewee must define the key points (s)he wishes to convey. Fourthly, (s)he must develop arguments which move the questions asked back to those key points. Fifthly, (s)he must develop the technique of completing sentences which stand scrutiny in their own right, and can be individually quoted out of context. Sixthly, a subtle technique of reitera-

tion (NOT repetition) is an advantageous strategy, where redundancy reduces the potential for misunderstanding. Finally, the interviewee must not let slip any red herrings which may prove to be more tempting for the interviewer than the core story itself.

The colourful stories which archaeologists relish telling (including perhaps the ones we as editors have reported!) are often the result of inexperienced handling of the media which break the advice given above. Brian Fagan has relayed to us a very positive view: 'If you look behind the façade, I would say that archaeology generally gets an excellent press, except, of course, for the lunatic fringe.' In no small measure, his success is related to the following of careful, archaeologically situated, guidelines which he commends:


- 'Always return phone calls, even if you cannot help with a specific question. The courtesy is appreciated and remembered if ever you need them. Cultivate relationships and be sure to call and thank the writer if the story is a good one.
- 'Always be honest and upfront and tell the strict truth. Ninety-nine percent of all journalists are on very tight deadlines, want to get the story right, and are not interested in ifs, buts, and probabilities. This means that you should not hesitate to give a wider picture as background, even if it is a bit more general than perhaps you would like. Every discovery has a context, it's up to you to provide it.
- 'Be very specific if you are saying something that is not for publication. It will be respected, because most journalists value their informants.
- 'Avoid jargon and explain carefully what you are saying if it is a technical matter. A good journalist will ask questions to be sure they get it correct.
- 'Most of the time, the caller is writing a story about people. The hackneyed saying 'Archaeology is about people, stupid' is all too true. Even if the subject is medieval rabbit keeping or Ice Age beetles, tell the story in terms of people and make your contribution a story. Then the subject lives and the journalist gets a better story.
- 'Never make rude remarks about colleagues or gossip. It adds nothing to the story and you can always respond with a no comment if you feel the questions are over the

line. Otherwise, as I have learned to my cost, it's amazing what can quite innocently get into print.

- 'If you get a chance to see a draft, all the better. Most times you will not. If the story is inaccurate, do not call the journalist and curse them. Let it go and move on. These things are transitory and very rarely give a false image of archaeology. And remember that a journalist is on archaeology one day, something quite different the next. It's nothing personal, but the nature of their work.'
- 'This may seem elementary, but be courteous to writers and journalists. They are just doing their job. Archaeologists as a group need a reputation for being courteous and we have one. All it needs is a few people abusing those who write about us, and the damage is done. Yes, we are specialists in an often esoteric science, but we are not discourteous specialists!'

References

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 BETTINA ARNOLD, like Brian Fagan, has the advantage of good experience of both sides of the Atlantic. She kindly gave us her contrasting views on the complex relationship of archaeology to the media:

'The relationship between archaeology and the media is a conflicting one mainly because the agendas represented are so disparate. On the one hand, both fields depend on public support to a considerable extent. However, while academic archaeology is frequently in a state of denial with respect to that dependence, the media are often too willing to cater to the demands of public taste and opinion, sacrificing content and quality to soundbites and sensationalism. On the other hand, archaeology has been news, and entertainment, almost since its inception as a profession, from Howard Carter's discoveries in the Valley of the Kings to this summer's Hollywood blockbuster *Tomb Raider* (about as far from "real" archaeology as it is possible to get). Archaeology's mix of adventure, exotic locales and ancient treasure has proved enduringly irresistible, and still has the power to fire the public imagination. The problem is that "real" archaeology is 99% slogging,

repetitive and exacting work and only 1% adventure (if that), and the message most archaeologists want to send to the public — concern for the protection and preservation of the past — is seen by the media as tedious and do-gooding — in short, not "newsworthy". This is the reason virtually every encounter between "us" and "them" turns into a sort of tug-of-war between the education and entertainment potential of a magazine article or documentary film. Naturally, not all television production companies or magazines are created equal — some are more willing than others to listen to what those of us in the profession have to say, and may even try to compromise between selling the maximum number of copies or obtaining the most lucrative deal for a series and producing pieces that actually have some content and report the details of a discovery or project accurately.

'Unfortunately, my own experiences with "the media" have been fairly negative, perhaps partly because both of my research interests — archaeology under National Socialism in Germany, and Celtic Europe — have spawned a tremendous amount of lunatic fringe material, and can almost be considered "industries" in their own right (just type the search terms "Celtic" or "Nazi" into an Internet search engine, and take cover). That, of course, is precisely why the media tend to pick up on stories related to one or the other of these topics with particular regularity. My own conviction (not shared by many academic archaeologists, for whom "popularizing" and "public education" are pejorative terms) is that those of us fortunate enough to be paid to do what we love (even if the pay is often laughably poor) have an obligation to make some part of our research accessible to the public. This is also the most effective way to ensure that there will be an archaeological record around several centuries from now. In many ways our agenda is much the same as that of wildlife biologists, who have recognized the importance of public education in conservation, and who also are faced with a finite resource that is in need of protection and stewardship, as well as study. At the same time, I am still (after two decades in this profession) idealistic enough to believe that archaeologists have something to say that people need to hear. We have a perspective on the passing of time and the passing of cultures and civilizations that has tremendous potential for contempo-

rary policy making, and we condemn ourselves to a Cassandra-like role if we do not find a way to make our insights heard by “non-professionals”. The problem is that the conduit, the delivery system, the middleman in the transaction between archaeologists and the public is unequal to the task, and the message frequently gets through in truncated and garbled form. Either we need to train more archaeologists to become filmmakers and journalists, rewarding those who “popularize” the profession, or we must find a way of educating those who report on what we do, and what it means, outside the narrow confines of the academy.

There’s another point to be made here — archaeologists who do “reach out” and attempt to communicate with the public in a forum other than the academy are usually unprepared for the fact that this interaction is a two-way system. This can be disconcerting, and even threatening, at times. The first documentary for which I was interviewed was a joint American–Canadian production, aired in 1992 on The Learning Channel, part of a series simply entitled “Archaeology”, with John Rhys-Davies as the excessively plummy-voiced narrator. (I assume that since they couldn’t get Harrison Ford, they were willing to make do with Indie’s sidekick from *Raiders of the Lost Ark*.) *Archaeology* magazine had just featured a popular version of a scholarly article I had published in *ANTIQUITY* in 1990 on the uses and abuses of archaeology in National Socialist Germany, and the film company contacted me about contributing to their series. I had already had to endure a power struggle with the magazine over their proposed title for the article. They had wanted “Germany’s Nazi Past: Nightmare Years for Archaeology”, to which I responded by pointing out that this was a topic that really didn’t need to be sensationalized. Their idea of a compromise was two titles: one on the cover (“Germany’s Nazi Past: How the SS Rigged Europe’s Prehistory”) and one heading the article itself (“The Past as Propaganda: How Hitler’s Archaeologists Distorted European Prehistory to Justify Racist and Territorial Goals”). At that point I refrained from suggesting any more revisions, since each new version was worse than the one before it. The cover art featured a photo of the Brandenburg Gate in Berlin superimposed on a luridly red swastika against a black background. The content of the article itself they left alone, and I justi-

fied the title and cover art to myself on the basis of the actual messages the article was (subversively) sending: that ALL archaeological research is politically compromised, and not just because it is wholly or in part supported by state funds, and that German archaeology in the 1930s and 1940s was merely an extreme example of a universal phenomenon.

It was this article that had caught the attention of the film company, resulting in the airing of the episode “Unraveling Hitler’s Conspiracy” (a title that I was unable to dissuade the producers from using, even though Hitler had had little directly to do with the manipulation of archaeology for political purposes — and what conspiracy?) in the autumn of 1992. A few weeks after the film was shown, I had my first encounter with the two-way nature of presenting archaeology to the “public”, in the form of a six-page, single-spaced piece of hate mail from a white supremacist in Michigan, who accused me of being a race traitor and of conspiring with Jewish entertainment moguls in New York to discredit the German people. Not even particularly original vitriol, this letter was a chilling reminder of the fact that television is not like other media — it reaches more people across a broader spectrum than any other form of information exchange (with the exception of the Internet). Since that initial experience, I have had several additional encounters with television productions, most of them interested in some aspect of the “Nazi archaeology” topic.

When, a few years later, I was approached via e-mail by a British producer interested in doing a film on Atlantis, my initial response was to turn down the offer without much ceremony; I had visions of some sort of Nazi-occult-space-alien-invasion hybrid horror, and I wanted no part of it. They persisted. By this time I had learned a little about how to handle “the media”, and requested a script outline. When this was sent to me, I realized that, rather than providing a forum for every lunatic out there who claimed to know what had happened to this fabled “lost civilization” (Plato has a lot to answer for, in my opinion), the producers were concerned with setting up and then debunking the various “theories”, leaving the audience with a large question-mark. This time the series was introduced by Ted Danson, who hasn’t played an archaeologist alongside Harrison Ford, but whose father was a real-life

archaeologist — a concession of sorts to the importance of academic credentials, I suppose. I live for the day when it might occur to someone in the television documentary business that they could actually use an archaeologist as the host of such a programme — but we're a long way from that epiphany here in the United States, at least. (No *Time Team* so far!) This particular television experience was as positive as the last one had been disastrous, and my faith in the medium was partially restored as a result. I can live with the strange e-mails that I receive a day or two after the series airs — it was recently re-broadcast here in the US, presumably as a tie-in with the Disney animated film that is currently showing in theatres, and I had three e-mail messages in response. At least most of these electronic missives so far have ranged from strange-but-harmless to amusing. Still, the feeling that I am suddenly visible, exposed to the scrutiny of literally millions of people who seem to feel that they can consult me the way they would a reference librarian, and who can easily track me down *via* my Web site or other Internet resources, is unsettling.

Last summer, I had a rather different television experience, this time not as a “talking head” but as part of a German network television programme featuring the Celtic Iron Age in Swabia, with the focus on the Heuneburg hillfort and the burials in its vicinity. In the course of the initial “brainstorming session” in a local pub with the film crew, the head of the local branch of the State Monuments Office and several other archaeologists, it became clear that the director had absolutely no interest in archaeology *per se*. The cameraman confirmed this when he vetoed a suggestion from one of the archaeologists by saying dismissively “Anything you can't get across in three minutes of film won't register with the public anyway; they'll just tune it out.” The film crew spent three days on location, thankfully only one of which they spent at our site, during which I and the American excavation team were made to


- 1 pretend we were coming home from work at 8 a.m. (scrupulously clean)
- 2 pretend we were toasting our “spectacular find” (a bronze cauldron in an unlooted secondary grave from one of the mounds near the Heuneburg) by shouting “To the cauldron!” and clinking our beer mugs (filled with apple juice) together in unison

- 3 pretend we were working at our laptops and cleaning pottery.

We narrowly escaped having to pretend to actually FIND the cauldron (“You know, you could rebury it and then sort of prod around with those things — what are they called again? trowels, and kind of poke into it and go ‘Aha!’”). I was able to distract the director from this hare-brained scheme by suggesting that they film the conservator removing the vessel *en bloc* after encasing it in plaster bandages instead. Thank God she liked the idea, and as this took most of the afternoon of the day they were filming, we were able to escape any more embarrassing episodes of “let's pretend”. Of course, the film crew drove the conservator nearly mad by sitting about grumpily complaining that it was all taking too long and couldn't they speed it up a bit? But apparently we got off lightly, from what I heard of the filming of my German colleagues during the first two days. I never saw the final product, and I have to hope no-one I know did, either. The lesson I took away from this encounter was that network television has to be handled with even more care than documentary films, mainly because the time pressure involved obviates control over the form of the presentation to an even greater extent.

This is why I have responded very cautiously to the researcher for a German television programme (the same network, as it happens) who contacted me just last week about participating in (wait for it!) a series on Nazi archaeology. The only reason I'm willing to entertain the idea at all is that it's a GERMAN series at last (rather than American, Canadian or British), and not before time. Lest this very long-winded account be thought excessively self-centred and self-congratulatory, I hasten to add that I have no illusions about why I receive, on average, about two or three requests to participate in some sort of television programme or series every year. This has little or nothing to do with the quality of my research, or my prominence in the profession. It's partly due to my willingness to cooperate, either by providing background for an episode, or by agreeing to be interviewed, but mostly due to the “selling” potential of the work I do. I hasten to add that this is a classic example of what evolutionary biologists call “pre-adaptation”; I didn't choose these research topics in graduate school in order to get on TV, but they have allowed me a forum for getting across some of what I think

makes archaeology so important. The question could be asked, given the not especially complimentary way in which the media, especially television, has been portrayed in the preceding discussion, why I get involved in such projects at all. The answer is relatively simple — I believe in the power of the message to transcend the medium of its transmission. It is possible to word careful responses to questions so that, in spite of the interviewer's best (or worst) efforts, you achieve the goal of educating people about the power and the relevance of the archaeological past. Put another way — somebody has to do it, since the media have latched onto the appeal of archaeology, and will present it one way or the other. If we don't want others to wholly define us, and what we do as archaeologists, we need to be willing to participate in the process of defining ourselves — one could even say, justifying ourselves — to a wider audience.'

 PAUL PETTITT has kindly contributed this discussion of his experience of the media coverage of human origins.

It is certainly true that the media — in particular television — has a clichéd view of archaeologists. My first contact with television came when I was a Ph.D student in Cambridge. I was to act as “advisor” to the producer, crew and actors in BBC's *Noel's House Party*. This involved setting up a B-list celebrity (Shane Richie) for a ‘gotcha’ section of the show, ostensibly employed to present a children's television programme on ‘Stone Age Life’. The purpose of the exercise was to set up and embarrass the celebrity, to the point where, at the crescendo of chaos caused by impossible actors and physical disasters, Noel Edmonds would materialize and the celebrity realize to his embarrassment that the whole thing was a set-up and will appear on prime-time Saturday evening BBC. My role was to sit hidden in a van in a gravel quarry set, with the director, producer and Mr Edmonds, “prompting” through an earpiece an actor who was playing an archaeologist that Richie had to interview. Everything had to be covered: what if Shane Richie really knew something about archaeology? Having met him, I appreciate in retrospect that there was slim chance of this, but at the time the “archaeologist” had to appear informed. The actor's bearing and the whole reconstructed programme illustrated clearly the team's view of archaeologists. He wore a tweed suit and bow-

tie, was clearly stuck in the 1920s in terms of speech and mannerism, was from Cambridge (obviously) and was overweight and pedantic in the extreme. Actors playing the ‘Stone Age people’ wore coarse furs that even Neanderthals would have thought of little use, and took every opportunity to erupt into grunts and a bottom-thrusting, club-wielding primitive “dance” around their fire. The hapless archaeologist was not happy, and at the end of his earpiece neither was I. But in this humorous (and entirely true) anecdote exist some of the frictions between two very different enterprises. One exists unashamedly to tell stories; the other vociferously denies that it does so.

‘Are we dissatisfied with the media's portrayal of archaeology and archaeologists? There is, I think, little in the way of informed debate within archaeology as to the nature, relevance and indeed power of the media. A recent TAG-2000 session on archaeology and the media amounted to no more than a mutual back-slapping between the *Meet the Ancestors* and *Time Team* crews, accompanied by some meaningless platitudes by the chair and a speaker whose professed academic interests included the media. Radio aside, there is far more to archaeological television, thankfully, than these two flagships. Archaeology in its many facets forms one of the main targets of television commissioning editors at present. In my experience, working off and on screen with some 14 television production companies over the last five years, there is a great deal of enthusiasm, professionalism and genuine concern to “get things right” scientifically. This is perhaps not surprising when one considers the cost of such programmes: the two hours' screen time of *Neanderthal* had a budget of £1 million, making it the most expensive non-animated (i.e. non *Walking with Dinosaurs*) programme ever made for Channel Four.

‘Archaeologists are fond of criticizing heavily television and radio programmes on archaeological matters, and presumably this relates to a degree of professional pride. As one of two scientific advisors for Channel Four's *Neanderthal*, I was subject to a barrage of critical comments from colleagues, relating either to gender issues or to the specific differences between the reconstructions of Neanderthals and Cro-Magnons. Central to this issue is the role of the scientific advisor. I, and the other advisor, Chris Stringer, did not write the programmes.

We answered as many questions as we could, using the extent of our knowledge and what we hoped was sound scientific judgement. Needless to say, there is a point at which data either ends or becomes too poor to interpret with confidence. In archaeology our work generally ends at this point; in television it cannot. I have to say that some of the questions raised by the production crew were some of the most challenging I've experienced: how would a Neanderthal father have behaved towards his son? Did Neanderthals enjoy sex?

I think that it is worth emphasizing — as it seems to me most academics forget this — that the media exist predominantly for entertainment, whether or not an educational element is involved. Television programmes are not academic papers: they are driven by a visual medium and by a narrative, and if some scientific information — as far as archaeologists possess it — can be communicated within this format, then all the better. It only works with a strong visual catch and a good story to work around. Interpretation seems to be the most contentious issue: we are fully happy to accept in archaeological papers some (often wildly) speculative interpretation providing it is forwarded as such, but we are far less tolerant about this appearing on television. It is worth emphasizing that there are no blank spaces on a TV screen, and we must accept that gaps in knowledge need to be filled.

As archaeologists have to sell good science to funding bodies, television producers and directors have to sell good stories to commissioning editors. Programmes examining the many issues of chronological imprecision in Oxygen Isotope Stage 3 or of the technical intricacies of the manufacture of Egyptian blue glaze are not going to produce impressive viewing figures. We have to accept that certain issues that may be perceived by the viewing public as “glamorous” will occur time and time again. It is surely our own responsibility to interact with the media to ensure that the same old themes — how Stonehenge was erected, the alignment of the pyramids — do not keep reappearing. Certain concepts sell, and I suspect that we will simply be unable to get away from these: the notion of two human species actually meeting was central to *Neanderthal*; the question of Neanderthal cannibalism was raised repeatedly on radio interviews in the wake of collaborative work I undertook on stable iso-

tope dietary analysis of Neanderthal remains. A relatively sober live interview on Radio Four's *Today* was brought to a conclusion with some humorous comments on cannibalism, and the producer of Radio Four's *Start the Week* phoned me to talk about a possible interview on “Neanderthal cannibalism”. An impressive amount of national and regional radio stations were interested in the radiocarbon dating of the bones, apparently of St David (they were not), and in all interviews I undertook (BBC national, BBC world service, HTV Wales), I was asked whether the status of these bones as belonging to a *saint* was a scientific issue. The dating of the Shroud of Turin inevitably followed. Similarly, in the wake of a major AMS radiocarbon dating project of Stonehenge, the most commonly asked question I faced on radio interviews was how it was actually erected, nothing to do with the dating project, nor for that matter something within my field of expertise. In recent years, the contribution of molecular studies to archaeological issues has been taken up with enthusiasm by all forms of the media.

This having been said, we all have a responsibility to promulgate scientific rigour. I was pleased to be invited by the producer of BBC1's “Horizon” programme on Graeme Hancock's “theories” to write a document in support of the programme, when Hancock complained to the Broadcasting Standards Commission. Hancock's work, and programmes that have appeared to support it, represent an unforgivable detraction from scientific rigour and respectability, and academics have a role to play in ensuring that public licence-payers' money is not wasted in such a manner. Nine out of ten of Hancock's complaints were rejected by the commission. This is, however, a good illustration that programmes are not inviolable; like academic papers they are subject to peer review, criticism and even retraction.

Encouragingly, radiocarbon dating is now a well-established feature of television and Open University science learning. There is still, however, the need for a glamorous “pull”. The possible Neanderthal/modern human “hybrid” from Lagar Velho formed the entire subject of an Open University/Discovery programme, and was reported widely in the newspapers, and on the radio and television. A few years back I was filmed for a Channel Four *Science in Focus* programme on radioactivity. An Egyptian mummy — on display in the British Museum — was deemed to

be the only thing glamorous enough to hold schoolchildren's attention for the 10-minute feature. Ironically — and this didn't matter to the production company of course — the precision of stylistically based dating of the sarcophagus rendered radiocarbon dating irrelevant to this particular mummy. The important thing was that it was a *mummy*. As we were therefore “faking” the dating, the BM understandably didn't want us cutting a sample of mummy wrapping from a completely intact mummy, so a fragment of a friend's oily motorbike rag has been immortalized on film as a fragment of 21st Dynasty mummy wrapping. Such legerdemain, of course, is an acceptable part of the televisual medium, and we should suspect nothing better.

‘On the subject of manipulation, there is the issue of “damping down”. True, producers will want to avoid “too many heads” arguing for disparate interpretations of archaeological data. Two scholars — each with a viewpoint in fundamental opposition to the other — is the ideal, and to be frank, this latter ideal more closely approximates academic reality for the most part. Such “simplified” debates formed the main agenda for Channel Four's *Secrets of the Stone Age*. After all, we have to appreciate target audiences: archaeological programmes are not made for archaeologists.

‘I can report that Wall to Wall TV are producing, for Channel Four, a two-part sequel to the highly successful *Neanderthal*, which beat Simon Schama's *History of Britain* and ‘The World at War in Colour’ to a Royal Television Society award and has been nominated for Emmys in three areas. It should be re-screened in autumn or winter, accompanied by a ‘making of’ programme. The sequel, a two-parter provisionally entitled *Ice World* examines how climate change has been responsible for major changes in human evolution and behaviour. Part of the series will be narrative-driven and set in mid Upper Palaeolithic Europe as the climate declines towards the Last Glacial Maximum. In addition, BBC TV are producing a four-part series on ancient technological achievement (*How did they do that?!*) which among other things will focus on the ubiquitous pyramids. BBC Radio are producing a *Radio History of the World* which begins in the Pleistocene, and BBC TV are producing a sequel to *Walking with Dinosaurs* based on extinct Pleistocene/early Holocene animals provisionally entitled *Walking with the Beasts*.

‘Overall, I am strongly in favour of the media's interest in archaeology. As we are ultimately dependent on the public's money, the media form the main route in which our endeavours are fed back to the funders. Raising the public's appreciation of archaeological matters at any scale, from the often parochial themes addressed by *Time Team* to international issues with relevance to modern concerns such as climate change, can only be a good thing for the discipline. If we feel that televisual storytelling gives an incorrect or distorted picture of the archaeological past or present then the onus is upon us to redress this. As media coverage of archaeological endeavour will only continue to increase, we must continue to develop a meaningful dialogue with production companies. Given the source of most archaeological funding it is an obligation. And in any case, it pays a lot more than academia.’

✂ We are also happy to print an article by one of the early television producers, FORBES TAYLOR, particularly in the context of the recent death of BRIAN HOPE-TAYLOR, one of the academic archaeologists who took to media presentation. Forbes Taylor reflects on the history of the relationship between television and archaeology in the United Kingdom.

‘Not entirely what it could be: historical perspectives on modern archaeology TV programmes’ (based on a paper delivered to the Institute of Field Archaeologists at Newcastle University, 2001)

In January this year Brian Hope-Taylor died. Many readers may have known him, although in his later years he shut himself away from us. Many readers will have heard of him, of course. His name immediately brings to mind his epic Yeavinger dig. What younger people may not know was that, for a brief while in the 1960s, he was a celebrated television personality. Brian and I made two major series for Anglia Television. ‘Who Were The British?’, in 1965, and ‘The Lost Centuries’, in 1968. We also worked together on single programmes on excavations he was currently engaged in. These were early examples of a pretty unlikely genre — television archaeology.

Television — and archaeology. When you think about it, it's hardly an obvious combination — archaeology, the academic study of the ancient

past, and popular television, the most ephemeral of features of our present lives. They don't exactly go together like a horse and carriage. I nearly said 'love and marriage', but that's a bit of an archaeological concept nowadays.

Subject-matter for broadcasting has traditionally emerged 'accidentally' — and still does to a large extent. Sometimes it is the product of committee decisions, but often it results from the personal interest, even fixation, of an individual producer. This was even more so in the past. In such a situation, it was probably inevitable that someone should have come upon archaeology, or that archaeology should have materialized inside broadcasting studios along with the myriad other subjects for programme fodder. The catch is that, as in other cases, the archaeologists' and the television producers' purposes are essentially different. One might even say they are opposed. It is not my place to discuss the purposes of archaeologists. I am, however, qualified to examine those of the television producers, and to reflect on how archaeology has been treated on television over the years and how those ways have changed. I shall not attempt to give you any kind of comprehensive catalogue of archaeology programmes. I would not be able to do so, because there have been many programmes I have not seen and I would be sure to miss something. Instead I shall try to pick my way through the more influential examples, and in this way point up some morals which may be of help to you. I apologise if this survey gives undue emphasis to programmes I made. I would not wish to claim that they were in any way superior to those produced by others. It is just that they are the parts of the story I know most about.

Once upon a time it seemed as if the misunderstanding between academia and television was total. There is an apocryphal story that when an Anglia Television producer wrote to an eminent professor at Cambridge University inviting him to appear on a programme and suggesting a fee of five guineas, the professor replied, 'I would be delighted to appear on your programme and enclose my fee of five guineas.'

Times have moved on! Practically everyone one meets nowadays has been on television — and has been misquoted, misrepresented, had his furniture re-arranged and his marriage put at risk. The mood has changed from curiosity and naïvety to cynicism and irritation. I have to concede that much of the blame for this has to be laid at the door of television producers.

Some people like to talk of a 'golden age' of television, and there is certainly a body of opinion that archaeology got a more serious treatment in earlier days. The two series I made, and others that were being produced by the BBC at that time, have even been called, rather flatteringly, in my opinion, 'vintage'. To compare these programmes with those being produced nowadays, in an attempt to judge whether they were really so much better, would be an idle, probably invalid, exercise. They were products of their time. Not only were the techniques and vernacular specific to television production 35 years ago very different, but the audience was very different, too — in its taste, its general level of knowledge, and — crucially — in the time it was prepared to devote to watching television.

Think about it — thirty years ago — your parents' generation. Would we television producers have been justified in assuming that they knew what we were talking about when we spoke of ¹⁴C? That they knew that the Mezquita is in Cordoba and Ankor Wat is in Cambodia? Today we may make such assumptions. But when we told the general public about these things back then, it was all fresh, novel and interesting.

For us television producers, too, 30 years ago, it was a far more exciting and unexplored time. Practically everything we did was to some extent experimental. I directed the first television film unit ever to be allowed in the Catacombs in Rome. In Denmark, the curator at Silkeborg actually took Tollund Man's head out of its case and handed it to us. In fact, our hot film lights melted the wax in its skin and brought it out in blisters. I thought I had ruined Tollund Man until the jolly Danish custodian gave him a wash with warm water which smoothed the wax out again!

Before we can get into examining and assessing the treatment of archaeology on television over the years, we might take a glance back over the nature of the television business itself.

The early history of broadcasting in Britain means, of course, the BBC — that extraordinary institution founded 80 years ago and moulded by the autocratic presbyterian, Sir John — later Lord — Reith. A flavour of the organization can be gained by remembering that early news-readers were required to wear evening dress, even though it was *sound* radio, and they could not be seen. It was 'after dinner' and, of course, gentlemen *would* be dressed like that.

The organization that Reith ruled over stated its mission to 'instruct, inform and entertain' — in that order. Producers, mostly male, were recruited almost entirely from Oxbridge. A 'good' college was a help, which in those days presupposed a Public School education, and a First — probably in Greats or Eng. Lit. — preferred. Such young men had therefore rubbed shoulders with historians and archaeologists, if only to throw them in the Cam or Cherwell, and could recognize academic discipline when they saw it. Those who subsequently rose to power as departmental heads were authoritarian, often dictatorial, and very definitely egotistical, with pre-formed views on all sorts of subject.

Public broadcasting at first was for only a few hours a day. It was not considered good for the public to spend too much time on frivolous things — the lower orders should not be distracted from the work they had to do.

Among the BBC's improving works was a strand of broadcasting known quaintly as 'Talks'. Some flavour of what these were all about can be culled from the pages of *The BBC Yearbook* of 1934. I paraphrase:

'It is now November', muses the writer. 'For the past six weeks, a member of the Talks Branch has had to face the problem of what to put into the programme at 9.20 p.m. on Saturday, March 31st, 1934 . . . He has got to think of something that will be of interest to the widest possible number of listeners four months hence' (this is before the days of television, of course). 'And he has got to think quickly' [quickly? — four months hence? Wow!] 'because speakers must be found and final programme settled in time to have the Talks Pamphlet ready for Christmas. "Something of interest" — there was a letter in this morning's post suggesting a series of talks on "how to keep mice, moths and mildew out of grand pianos". There was suggestion too for a stamp collector's talk, and another for the clear exposition of the Income Tax Acts. They are all subjects of interest, but none of them will really do for a Saturday night series. However, some idea is eventually approved — a series "In Quest Of Treasure" or some such thing . . .'

(Ah yes — treasure . . .)

All material had to be scripted in advance and approved. The BBC hierarchy was terrified of *ad lib* content — not so much in case a rude word was spoken, though that was a consideration, but because of the danger that something subversive or disrespectful might be uttered. Ironic, when one remembers that the communist spy Guy Burgess was on the staff.

Archaeology may have featured from time to time in the 1930s. It would be nice to think that perhaps Leonard Woolley, Howard Carter or Sir Arthur Evans were invited to give 'talks' — or even Gordon Childe, though as his political opinions were widely known, he may have been too risky a property.

We have a far more detailed knowledge of archaeology's relationship with the broadcasting media after the end of World War II. The BBC's nascent television service had been suspended during the war, but in 1945 the corporation emerged from its wartime austerity and set about making use of the developments in technology that had taken place in the intervening years. That meant television. Sound radio was still important, however. In fact, the elderly mandarins in Langham Place regarded television as faintly vulgar — it was flashy, exhibitionist and above all, 'new', which was something decent chaps thought 'bad form'. If any of the young men who joined the corporation on demobilization from the forces appeared too racy for Broadcasting House they were despatched to Alexandra Palace to do their thing. Television was only broadcast for one or two hours a day at first, to a veritable handful of people who had to be content with a tiny, flickering bluish picture buried in the middle of a walnut-veneered cabinet. The equipment in the studio at Alexandra Palace was hardly less primitive. The cameras had optical viewfinders strapped to their sides, which turned the image upside down, so that the cameramen had to learn to pan left when they wanted to go right and tilt down when they wanted to go up. Films were broadcast by projecting them into the lens of a television camera.

In talking about these early days, I draw substantially on the recollections of Professor Glyn Daniel, contained in his autobiography, *Some Small Harvest*. If you have not read this book, written in 1986, not long before his death, I commend it as a richly entertaining record of a fascinating life at the centre of British archaeology. In it Glyn recalls how on returning to his teaching post at Cambridge from being an RAF Wing Commander in charge of aerial photographic reconnaissance in India, he was invited by a BBC producer to give a talk on his wartime experience and its application to archaeology. This developed into a collaboration with the producer, Gilbert Phelps, to develop an on-going sound-radio series called 'The

Archaeologist', which continued for several years and featured, among other notable figures, Mortimer Wheeler and Stuart Piggott. I know no more than that about these programmes, and it would be interesting to discover what they were about and whether the scripts still exist anywhere.

Glyn Daniel then migrated to television, and became a household figure as a result of *Animal, Vegetable, Mineral?*, a British version of a highly popular American programme called *Where In The World?*, invented by the Director of the University of Pennsylvania at Philadelphia Museum. A panel of experts were called upon to guess the nature and provenance of objects submitted to them by museums. Glyn was the Chairman and the panel included Mortimer Wheeler, Sean O'Riordain, Jacquetta Hawkes, Geoffrey Bushnell, Gordon Childe and Stuart Piggott. The series was produced by Paul Johnstone, who was the first television producer to take a continuing interest in archaeology. However, *Animal, Vegetable, Mineral*, broadcast from 1952 to 59, already displayed — probably unconsciously — the tendency of the broadcasters to deviate and dissemble in their approach to 'serious' or potentially difficult subject matter. Although *Animal, Vegetable, Mineral* was claimed to be a didactic exercise designed to interest viewers in antiquity, what appeared — and was accepted by the viewers as such — was a 'quiz show', that fitted into a familiar and proven audience-attracting category which the broadcasters understood and felt comfortable with. It was also a bit of a 'freak show' as well — people whom the public would think odd-looking, with 'freakishly' enormous intellects, acting in a donnish faintly absurd way. Super stuff for television producers! I must add that I don't think Paul Johnstone saw it in this way — he was a very serious practitioner with a History First from Oxford — but I stick to my opinion about the programme.

One might, however, reflect on the words of David Attenborough, in his memorial address for Paul Johnstone — 'Archaeologists were well ahead of people from other academic disciplines in realizing the value and potential of television', he said, 'of seeing that even a quiz show like "Animal, Vegetable, Mineral?" could provide worthwhile insights'.

This lacking in confidence in the material on the part of the broadcasters, and perceived need to package archaeology and market it under

false and anodyne guises, continued — and of course continues today. In those early days, we are talking of a television service, BBC1, that broadcast for only a few hours each evening and for a little longer at weekends. Alternative forms of entertainment were far less available in those days, and the viewers were consequently more receptive to anything that was served up to them.

Commercial television appeared in the mid 1950s, with producers recruited from wider fields, experienced in the theatre, films and journalism. When Anglia Television began broadcasting in 1959, principally to East Anglia, but on occasion nationally, I joined as Head of Films. My background could not have been more different from Paul Johnstone's — 10 years as a film writer/director of documentaries, and director of television series like *The Adventures Of Robin Hood* and *Sir Lancelot*, following Sandhurst and the army, where, during my service in Greece, Palestine and Egypt I had become infected with 'The Back-Looking Curiosity' — that wonderful phrase — of William Stukeley's, I think — that Glyn Daniel loved to quote.

Although commercial television was all about making money, and was therefore aimed at the widest general audience, in the early days it was as tightly regulated as the BBC. A proportion of 'serious' programming was demanded. Anglia Television appointed Glyn Daniel — not yet occupant of the illustrious Disney Chair — to its board of directors, and he, of course, announced that the company would screen archaeology.

The BBC management was miffed by the apparent desertion of one of their stars, and responded with *Buried Treasure*, produced by Paul Johnstone. Although the title of this series was a surprising one for something that hoped to attract serious archaeologists — in that it suggested that archaeology is all about treasure hunts — it was a very worthy and finely-made miscellany of single programmes dealing with a wide variety of archaeological topics; the Piltdown Man fraud, Maiden Castle and Mammoth Hunting. At Skara Brae, Glyn Daniel dressed up as a Neolithic man, with a false beard, and dressed in a cowhide costume rigged up by a young amateur archaeologist named Brian Hope-Taylor! One result of this was that Glyn was 'warned off' by certain of his collegiate associates. One went as far as to tell him: 'You must begin to extricate yourself from the

media if you are going to exist as a respectable archaeologist'. Of course, Glyn did no such thing, and continued to endure the slings and arrows, as well as bask in the glory, of tele-celebrity until his far too early death. I don't think *Buried Treasure* had any particular overall philosophy, other than to widen knowledge of archaeological activity among the general public.

Anglia's first major series, made in 1965, was *Who Were The British?*. The project began as a series of filmed programmes, with the working title 'The Ancient Britons', which was to give a pictorial account of the earliest inhabitants of these islands via scenes of prehistoric monuments. I'll say a little about the way the concept developed, because it demonstrates how important personal relationships are in embarking on a collaboration between specialist and television producer. The series was an ambitious one, to be broadcast nationally, and as Anglia, which is a regional station, did not have access to the national network, the London broadcaster, Rediffusion, had agreed to transmit it — as long as Rediffusion had editorial control. As a matter of fact, this was not as onerous as it might appear, because the Chairman of Rediffusion, Paul Adorian, happened to be a keen amateur archaeologist. When I was invited to join the project as director, a substantial amount of work on the script had already been done, by Brian Hope-Taylor — who was to be the presenter — and a producer who had been imposed on Anglia by Rediffusion. The problem was that Hope-Taylor had formed a distinct dislike of this producer, who was really a Current Affairs man, with a robust scepticism of academics and the claims of archaeologists. Fortunately, Brian Hope-Taylor and I formed an instant liking for each other, and a collaboration began that was to stand the test of many further projects in the future. The immediate dilemma was what to do about the Rediffusion man, who was actually a genial chap who had no desire to waste more time than necessary on pedestrian projects like regional archaeology programmes. The solution was to allow him to take the credit as Producer, while packing him off out of the way with the things he was really interested in when Brian and I were filming.

The scripts and the general thrust of the series emerged while we were actually shooting. Brian and I would work long into the night in the hotels where we were on location, throw-

ing ideas at each other and generally having a very exciting creative experience.

It seemed to me that the scripts as first devised lacked any strong line. It did not seem enough just to say 'this is what the Ancient Britons were like — weren't they interesting?' There were too many worthy, but flabby and complacent programmes like that about — even then. Brian and I saw that we could impose a more valuable theme. A study in depth of an ancient people — the British — could be shown through contemporary eyes — of another ancient people, the Romans — so as to bring them vividly back to life. This way we might demonstrate that our ancestors were not quaint little sub-humans, if not cave-dwellers, as some people evidently thought, but fundamentally similar to ourselves. We also introduced a strong, recurring sub-theme — that the study of the past helps us understand modern situations.

As I said earlier, this was a time when everything we did on television was novel and experimental, and I think this may have been the first time that anyone used the technique of visually combining past circumstances with modern ones. When Brian talked about the way the Roman army marched across Britain, subjugating tribe after tribe, we devised a sort of 'Battle Of Britain' ops-room, Roman style, with a plotting table for Brian to move symbols across. Of course, in those days, computer-animation had not been invented, so the kind of reconstructions, complete with artificial people walking around, that we see today in programmes like *Son Of God*, were not only impossible, but unimaginable. We had to resurrect ancient scenes and sounds and movement by suggestion, with a heavy dose of imagination required from the viewers. Who can say that it was less effective than modern techniques? It might even be said that these over-literal reconstructions remove some of the romance of the remote past.

As far as excavation was concerned, Brian showed us one of his impressive open-area sites and gave us a thumbnail lecture on stratification and burial.

Well, the series turned out to be a considerable success, largely due to Brian Hope-Taylor's instinctive grasp of the possibilities of the medium. *Who Were The British?* won a satisfyingly large audience, although the national network lost its nerve and consigned it to the wee small hours. The academic establishment — which to us at Anglia meant Cambridge —

the university and the department in Downing Street — approved, somewhat reluctantly, I suspected. One result was that our cameras ceased to be banned from the colleges, and Glyn no longer had to smuggle us up to his rooms in John's under cover of darkness.

Paul Johnstone, at the BBC, followed *Buried Treasure* with *Chronicle*, a series that was more philosophical in outlook — perhaps, I flatter myself in thinking, because of ideas Brian Hope-Taylor and I had been exploring. *Chronicle* asked how the bluestones got to Stonehenge, how prehistoric people crossed oceans, how the Romano-British smelted iron — and attempted to provide answers through archaeological reasoning that was developed as the programme proceeded.

Brian Hope-Taylor and I came together again when a friend telephoned me on Boxing Day, 1966, and mentioned in passing that he had run into Brian excavating at York Minster. Something made me telephone Brian immediately and he told me he was standing in the crossing of the Minster and that it was about to fall down! The great lantern tower had been showing signs of settlement. The subterranean supports needed to be inspected and the Dean and Chapter knew Brian had an ambition to discover whether the remains of a Saxon timber structure, associated with the dynasty he had revealed at Yeavinger, lay beneath the Minster. They had asked him to conduct an archaeological investigation, and his dig immediately exposed a frightening sight. The four great columns supporting the lantern tower were built on an oak raft which had dried out due to a change in the water table, and the columns were effectively 'punching' their way through the underlying ground.

What followed, as far as tele-archaeology is concerned, is an example of another interesting possibility. I persuaded Anglia to produce a programme that would record the work of excavation and restoration, and this would be used to launch an appeal for donations to fund the work. The result was an interesting programme in itself, that also helped raise the £2 million that it cost to rescue the Minster for posterity.

Anglia — encouraged by the *succès d'estime* if not the *'succès vulgaire'* of these programmes — then allowed me to work with Brian Hope-Taylor on a sequel to *Who Were The British?*, which would take advantage of Brian's specialized knowledge in the field of Anglo-Saxon

archaeology. The themes explored in *Who Were The British?* would be revisited, and the story we began in those programmes continued into later Romano-British, Saxon, Viking and early Renaissance times — the so-called 'Dark Ages'. The relevance of past events to modern situations would be pursued even more vigorously, using whatever new television techniques that had become available. Brian and I were indeed pampered. We were sent off on a cruise ship down the Adriatic from Venice to work on the scripts. We made a lightning tour from Istanbul to Syria, where we visited Palmyra, to Cairo and Rome and Ravenna, to Arles and Nîmes, to Cordoba and Segovia. Later that year, 1967, the Israelis launched the so-called 'Six-Day War' and changed the map of the Middle East, so that, when our series went into principal photography in 1968, Palmyra was a no-go place and we were forced to substitute Jerash in Jordan. We were not entirely out of the firing-line, however, and when the Israelis came across the Jordan in force again I converted our unit into a news crew for ITN and we went to the battle — with Brian along for the ride. The remainder of that story is for another occasion.

'Dirt archaeology' came into the series mainly through the third of the programmes, dealing with the Arthurian question. We visited Leslie Alcock's dig at South Cadbury and were again able to see a large open-area site being worked. In this, and in another programme that showed us a Saxon settlement site, Brian talked about his passion — the study of traces of wooden post-holes. I remember a heated discussion with another archaeologist concerning the significance of the slanting holes associated with *Grubenhäuser*.

Our series took the remainder of that year and all the next to bring to completion. Eventually, one of my lords and masters decreed that our title, 'The Dark Ages', was too downbeat. I was required to submit a list of 12 possibles, from which my superiors would make their choice. I felt duly insulted, and have to confess that having in mind the need for a crowd-puller I sent them 'Excavation Street', 'Sunday Night At The Colosseum' and 'Top Of The Pots'. They were not amused. The title they chose was hardly less risible. *The Lost Centuries*, I thought, would be greeted as something to do with cricket. But that is the title the series suffered under, and it didn't in the end do all that much harm. Once again, the network demon-



*Brian Hope-Taylor
with the Devil's Dyke
skeleton, in the early
1970s.*

strated its faith in such subjects by transmitting the series at tea-time on Sundays in July during a heatwave, when everyone could confidently be expected to be on the beach. Surprisingly, the audience figures held up, and one person even told me that he and his family regularly came in early from the beach to see it.

Largely due to this intractable situation with the network companies, Anglia did not make further major national series. In any case, there was the escalating expense of making such programmes. Museums, ancient monuments and interviewees had 'got wise' and introduced fees, which quickly soared.

About this time, though, the BBC decided to mount an archaeological spectacular. I don't know

who it was originated the idea — whether it was the BBC or Richard Atkinson — but a decision was made to sponsor a major excavation of Silbury Hill, to settle once and for all just what it was, and why it was there. This came down to discovering what, if anything, was inside it. From the broadcasters' viewpoint, there had been exciting developments in television technology, with the ability to take video rather than film cameras on location. It was decided that the cameras would remain on site throughout the dig, so as to be there when the archaeologists broke through into some kind of central chamber and revealed Silbury Hill's secret to the world.

Had this happened, it would, of course, have made television history. In the event it turned

out a damp squib. Perhaps the BBC deserved it for promoting archaeology as a treasure-hunt. No doubt Richard Atkinson was well-satisfied at having benefited from the television peoples' largesse in carrying out his investigation, however, so some good came out of it.

After Paul Johnstone's early death, a science-programme producer, the late Bruce Norman, succeeded as head of the *Chronicle* unit, and he began a move away from programmes about antiquity to the application of archaeological methodology to more recent times. Norman ensured that the BBC remained quite prolific in its historical output, however, and did give prominence to prehistoric archaeology at times.

Brian Hope-Taylor carried out his last major excavation on the Devil's Dyke in Cambridgeshire in the early 1970s. A new motorway was being driven through this massive earthwork which runs for 8 miles from Wood Ditton to Reach, and serves as a makeshift grandstand on the July Course at Newmarket Racecourse. We filmed the progress of the excavation throughout. It began unpromisingly from television's point of view as a rather arid exercise in elegant dissection, but then took a dramatic turn when Brian uncovered skeletal remains in the middle of the ditch. The figure was complete except for the absence of a hand and was lying on its right side. Would Brian discover, beneath, the sword and cloak clasp of a Saxon nobleman, we all hoped? No luck. The body was eventually dated by radiocarbon to the early 12th century, during the reign of Stephen. This raised an interesting possibility, because it appears that this was the only period in English history when mutilation was a form of statutory punishment — for coining. The malefactor's hand would be amputated and nailed to the door of the mint as a warning. And there had been a mint at Bury St Edmunds. Whether this was the explanation of the strange burial in the Devil's Dyke, we shall probably never know. If and when you take the dual carriageway, the A145, between Ipswich and Cambridge, you will pass exactly over the grave.

I now come to a very unhappy story — for me, at any rate. I tell it because it contains some valuable lessons for us to reflect on. In 1975 I was invited to work on something that I thought would be the crowning moment of my career, as far as archaeology was concerned — a programme about Richard Leakey's expedition at Koobi Fora, Lake Rudolph — Lake Turkana, as it is now called. At that moment it was a large

enterprise, by the Kenya National Museum and the University of California at Berkeley, examining Plio-Pleistocene fossil-beds that had produced examples of *Australopithecus* and were now yielding up the remains of what seemed to be another hominid, given the classification *Homo*, which had apparently been existing contemporaneously with *Australopithecus*. The expedition contained many lustrous names, including the anatomy professors, Michael Day and Alan Walker, vulcanologist Frank Fitch, and Glynn Isaac, then teaching at Berkeley.

Three years earlier, Richard Leakey, the son of Louis and Mary Leakey, had received a lot of publicity with the discovery of '1470 skull', on a horizon of approximately 2 million years BP measured by potassium-argon and fission-track dating of volcanic tuffs. It had been claimed by Richard Leakey to be not an *Australopithecine* but the earliest example of *Homo habilis* yet found — thus pushing the story of human origins back by a million or so years.

Our programme was intended to be part of Anglia's wildlife series, *Survival*, extending its study of the animal kingdom to humankind — we would look at the moment when the ape could be called human, putting it crudely. For me, this was the opportunity of a lifetime — a visit to the Garden of Eden, and a part to play in the very discovery of humankind's origin! I flattered myself with the thought that perhaps my experience in the treatment of such projects had been the reason for Anglia assigning me to it. I was too inexperienced in another direction — the commercial nature of international television — to see where it was all going.

Because of the very great cost of the enterprise, it developed as an early example of what is now common practice — an Anglo-American co-production — between Anglia and the National Geographic Society. Up to this time I had cherished the belief that the British were renowned as the best makers of documentaries in the world — and in fact many of my American friends had told me they shared that view. However, when the Americans came into the picture with this production it was a very different story. We could not be expected to know the needs of the American market, we were told, so the Americans assigned their own co-producer to work with me, a young man said to know what their viewers wanted.

The story that followed is a long one, and is partly told in Richard Leakey's memoirs, *One*

Life. Suffice it to say that what the American viewers wanted — or what my co-producer thought they wanted — was a shallow archaeological ‘thriller’. Richard Leakey — and I — had thought that a very compelling programme could be made about the whole story of the search for human origins, from Raymond Dart through to the current status exemplified by Skull 1470. The American wanted something altogether simpler and packed as far as possible with ‘action’. We would see Richard yanking his skulls out of the ground, and we would import a handful of ‘Stone Age’ natives for Richard to use as what were called ‘human analogues’ to run tests of the hunter-versus-scavenger rival theses. The naked natives could run around with stones and spears, chasing animals.

I had cut my teeth as a documentary director on the principle that documentary had to be, above all things, concerned with the truth, but here I was asked to stage a totally unconvincing reconstruction of the 1969 discovery of a complete *Australopithecus* skull with Richard and his wife, Meave, practically falling over it sticking out of the ground and saying ‘Ooh!’ and ‘Gosh!’ (they were as embarrassed about it as I was).

I found myself standing by with cameras rolling while the natives attempted to stone to death a full size Oryx, hamstrung and helpless from an attack by a lion the previous night — a futile exercise which turned the stomach and only came to an end when a Shankila Molo boy, shedding tears on behalf of the tortured animal, put it out of its misery with his spear.

The American co-producer only took time out when we visited the Nairobi lab and filmed a serious piece about taxonomy, with the fossils laid out alongside each other.

I was so disappointed by this farrago that I insisted that my name be removed from the credit titles when it was transmitted. This was no consolation for the anthropologists and archaeologists, who received a poor return for their time. The moral of this story for you is — be very careful who you collaborate with. Richard Leakey was fortunate in getting another bite at the cherry, when a reputable team from the BBC headed by science producer Graham Massey made a series called *The Making Of Mankind* with him.

Just before I left Anglia in 1977 I produced a locally broadcast series, though filmed throughout the British Isles, on Industrial Ar-

chaeology, called *Digging For Yesterday*. It brought me into contact with some first-class people in that field, like Neil Cossons, then at Ironbridge, and Frank Atkinson, of the Beamish Open-Air Museum. It was only too easy to ride my hobby-horse and emphasize the relevance of the past to the present, and the series received a very warm response from the viewers.

When I left Anglia to work in Oman, a former archaeologist, Paul Jordan, took my place. He made a number of programmes, including one on Stonehenge and the megalithic question, another on the controversy surrounding the discovery of North America, and yet another on the life work of Glyn Daniel, which I had planned to do.

Oman Television, where I was Director of Production, was — and is — in the middle of one of the most exciting archaeological sites in the world, as yet largely unexplored. The Director of Antiquities when I was there was Paolo Costa, who had also done pioneering work in the Yemen. Generally speaking, the Omanis are less interested in reflecting on their past than in creating a bright new chromium-plated world, but I managed to browbeat my mildly puzzled employers into letting me film one of Paolo’s digs on the remains of the prehistoric city beside Salalah in southern Oman. Some day, no doubt, a television company will spot the possibilities of a programme about the prehistoric Frankincense city called Sumharam, just north of Salalah. It is one of the strangest and most exciting places I have been to. Some people here may remember Andrew Williamson, who was tragically killed by a land-mine there during the struggle for power in 1975.

In 1981 Channel Four was launched, ostensibly to give opportunities to independent producers creating programmes of minority interests. It promised to be an ideal home for archaeology. I had returned to the UK and formed my own production company, The Unicorn Organisation, with some friends, including the anthropologist UCLA Professor Bernard Campbell and historian John Julius Norwich. Channel Four had appointed several former producers at the Open University as Commissioning Editors, so the atmosphere towards archaeology was distinctly receptive. Almost the first major series transmitted was our production, *The Blood Of The British*, which was presented by Catherine Hills. I confess that before Catherine came on the scene we had the

concept all wrong. I was way back in the Dark Ages, academically speaking, and still thought everyone believed that the British Isles were ravaged by continuous waves of invaders. Catherine disposed of those ideas pretty smartly, and came up with a very engrossing concept that set out to show, through visits to a variety of current excavations, that the invasion theory was simplistic and exaggerated. We went to Wharram Percy to see Philip Rahtz at work, to Repton, where Martin Biddle was excavating the Rectory garden, to Flag Fen to see what Francis Prior was up to. Barry Cunliffe showed us round his impressive open sites at Hengistbury Head and Danebury. George Eogan showed us the burial chamber at Knowth when it had been stripped of its earthen covering. We went to Scotland and Ireland, Austria and Scandinavia. Catherine was uncompromising about her material, but looked terrific (she'll hate me for saying it) and made her material exciting to large numbers of viewers. She lost out on the title of the series, which she did not like, but we and Channel Four thought television had to make the decision about what would attract an audience.

In the mid '80s, my company developed a large project to deal with the history of archaeology. Because of the enormous costs involved, the series was to have been an Anglo-American co-production, with a presenter, Brian Fagan, who though British, was a professor at the University of California at Santa Barbara. We secured the cooperation of many leading archaeologists throughout the world, and made a deal with the Los Angeles Public Broadcast station. Because we were independent producers we also needed to secure a British broadcast outlet, and I discussed collaboration with Bruce Norman. Unfortunately we were unable to work out a satisfactory arrangement and the project foundered. Not long afterwards, Norman produced *Footsteps*, his account of the history of archaeology, via the story of a selection of its leading exponents, from Belzoni to Reginald Le May. There is another moral in this story, or I would not have told it in such detail. It is — do not waste your time in lengthy negotiations with people who have no power. Snoop behind the scenes, if necessary. And if you are on the television side of things, be prepared to have any original ideas you may have nicked.

Channel Four was not able to help us with that project because of the very large amounts

of money involved, but has its heart in the right place as far as archaeology is concerned, even though most independent producers would say that the commissioning process and the rewards leave much to be desired. One less than happy effect of the casualization of employment brought about by the independent producer system is that it has become almost impossible to keep good creative teams together. However, it has produced good series like Catherine Hills' archaeology diary *Down To Earth*, and Romer's on Egyptology.

So, we come up to date — and, of course, you know as much about the current scene as I do. Probably more, because I find little of what I see on the box these days much to my taste. An honourable exception is the BBC's *Time Watch*, brilliantly produced by Lawrence Rees. Archaeology plays only an incidental part in it, however. At the moment, the only continuing exclusively archaeological strands are Channel Four's *Time Team* and *Meet The Ancestors*. The real nature of the first of these brings the story full circle. Whereas *Animal, Vegetable, Mineral?* was really a quiz show, *Time Team* is really a 'beat the clock' programme on the lines of (and probably inspired by) Alan Titchmarsh's gardening programme, *Ground Force*. I do not doubt, however, that Tony Robinson and his team have the best of intentions, and it is good that they are enthusiastic about archaeology, and have the talent that enables them to share that enthusiasm with the general public. However, it seems to me that the whole thrust of the concept is a reversal of what archaeology is really about, in representing excavation as a breathless race, when it is properly a measured meticulous investigation. But then, as a jaded colleague of mine once sighed, 'There are only a limited number of ways of making a hole in the ground interesting'.

Archaeology also figures in programmes on wider subjects, like the recent series on cannibalism, Anglia's *Interesting Dead People*, and curiosities like *Son Of God*. Co-productions — more often than not with American television — have become increasingly the order of the day. One result has been the glossy coffee-table series fronted by Michael Wood, which do not, of course, contain much archaeology — beautiful and interesting though they are. They do take the viewers on interesting tours of the great monuments of antiquity, however, and may in the future have to take the place of personal

visits by tourists if the present ravages caused by them are to be checked.

I fear that even these opportunities for archaeology to receive exposure on television will be increasingly rare in the future, as the production of serious documentaries of any kind gives way to cheap 'fly-on-the-wall' pastiches and so-called 'real-lives' programmes. One may hope that tomorrow's producers will be less satisfied than today's with such products, and will learn to listen to the audience and their own instincts again, instead of colluding in the debasement of an important creative medium.

From this necessarily incomplete survey some conclusions may be reached. Here are some of them . . .


Television is not a natural environment for archaeologists. It is therefore necessary to decide what purpose is desired and to 'use' the system to achieve it. Some things will be impossible. Television does not 'come naturally'. It is necessary for those who want to exploit it to learn what it can do — and what it cannot do. It is also necessary to learn how the business works, and to identify those elements that work in one's favour and which personnel have the right way of looking at things. Not easy — the television industry today is controlled by financiers and 'managers', and dominated by journalists, who may appear *simpatico* but probably have all the instincts of a tabloid editor. Personal relationships are vital.

Television is not an end in itself — for archaeologists, that is. There may be — and almost certainly will be — more important things to do.

Publicity is *not* always the most important thing in life. It is better to do no archaeology on television than bad, or trivial, archaeology.

Finally, I should like to express how enriched my life has been through my association with archaeology and archaeologists, many of whom are sadly no longer with us. Glyn Daniel, Mortimer Wheeler, Glynn Isaac — and of course, the sad, brilliant Brian Hope-Taylor, to whom — if you will permit me, I should like to dedicate this paper.

FORBES TAYLOR

 The media now has much broader boundaries. In Egyptology, as in other branches, time has moved on from the covering of the transport of Cleopatra's needle in the *Illustrated London News*. The Egyptology department of the British

Museum has been involved in a project at Tower Hamlets in London where the media coverage is provided at very local level by the local community (<http://www.towerhamlets-clc.org.uk/Egypt/egyphome.htm>). Another recent example is the *Virtually the Ice Age* (Creswell Crags) site which was launched at The British Museum in July by Dennis Skinner MP (www.creswell-crags.org.uk/virtuallytheiceage).

IAN WALL writes: 'The launch marked an imaginative partnership between The British Museum, Creswell Heritage Trust and Derby Museum and Art Gallery, which has taken the . . . internet into the Old Stone Age. Supported by Resource through the DCMS IT Challenge Fund, the European Regional Development Fund and The Coalfields Regeneration Trust, the new *Virtually the Ice Age* website is designed to take the archaeology of Creswell Crags out of museums and give it back to its place of origin and the wider world.'

'Creswell Crags, a beauty spot in Nottinghamshire and Derbyshire at the heart of what was one of Britain's major coalfields, is one of Europe's most important archaeological landscapes. Within the Magnesian Limestone are preserved the only cluster of Ice Age cave sites in the UK. Between 70,000 and 10,000 years ago the caves and fissures of the Crags provided shelter for Neanderthal and anatomically modern people through a crucial period of human evolution.'

'Since the 1870s, excavations have produced a wealth of evidence from which can be interpreted what life was like for hunters at the edge of Europe. The collections include stone and bone tools, a large quantity of faunal remains as well as Britain's oldest known work of art, a fine engraving of a horse found in Robin Hood Cave (and now in the British Museum's collections) which connects us with the great era of cave painting on the continent. The horse provides the banner for the website.'

'Unfortunately, since their discovery, the collections have been split up and are now stored in over 30 different museums in the UK. This website project has now brought some of those collections together for the first time and made them accessible to a wide audience. The collection is held in a database and can be searched in a number of different ways through the section on Exploring Objects.'

'The value of new media like the internet is that it allows objects to be placed back into

context. Three sections on the website allow visitors to explore three themes of the site:


- The archaeological discovery of the finds either through the eyes of archaeologists from the 1870s or through a tour of the sites in the Creswell Heritage Area.
- People from the Stone Age who camped at Creswell Crags more than 10,000 years ago including a journey into tools and raw materials and food and hunting.
- Changes in the climate and environment during the last 120,000 years brought to life through a series of fantastic paintings depicting what life might have been like at different periods.

'The website also makes it possible for people who are unable to visit Creswell Crags to look around the gorge and into the caves through a virtual tour. The tour takes a selection of views around the gorge and actually goes inside three of the caves, Robin Hood Cave, Church Hole and Pin Hole.

'In addition to providing access to the collections and the caves sites, there is also an opportunity to talk to staff at museums who look after the collections as well as specialists who are carrying out research. The message board is for everyone to use and is intended to bring visitors closer to the archaeology.

'Another feature, which may be of particular interest to your readers, is the News section where we intend to post articles about different aspects on Ice Age archaeology. This could be an article by a specialist who wants to reach a wider audience, it could be about events that are taking place and which celebrate the Ice Age. Contributions to this section would be most welcome.'

If readers require further information about the site they can contact Ian Wall at Creswell Crags Museum and Education Centre on 01909-720378, mail to ian@creswell-crags.org.uk

 A sign of the potential success of archaeology's coverage in the media is the setting-up in Britain of an All Party Archaeology Group as we go to press. The group will be chaired by Lord Renfrew and the secretary is Lord Redesdale; there are likely to be at least two vice chairs and the group's officers and composition will reflect the political composition of Parliament. The group is already supported by two part-time researchers and aims to pro-


mote archaeology and education in the parliamentary sphere. The group is already considering a number of initiatives. The first will be to assess the current state of British archaeology in the 21st century. To do this the group will shortly be appealing to all archaeological organizations, both professional and part-time, as well as individuals for short submissions of around 250 words, highlighting priorities for archaeology. The first deadline is likely to be at the end of December, but full details will be announced shortly, and there is likely to be a second round as the group will want to build up a comprehensive picture of the range of views about priorities and concerns that is genuinely all-embracing. The responses and information received are intended to act as a source for future research. The intention is to produce a summary report and make the full submissions available for future use. Apparently there will be a further announcement about this shortly after we go to press. The full parliamentary membership of the group will also shortly be available.

Once the submissions have been received and after analysis the group then plans to hold a number of sessions taking evidence from the leading players (in a similar way to a Select Committee of parliament) early in 2002 and produce a further report. The group will also examine further matters of concern, many of which were raised in the ill-fated Culture and Recreation Bill, which received a huge number of amendments in the House of Lords that were never debated because of the dissolution of parliament in May this year; indeed, the Bill did not even receive a Third Reading in the Lords. This failure to take up a number of important issues that had been raised more than four years ago in the consultation paper 'Protecting our Heritage', which was produced by the previous conservative Government in 1996, was one of the factors that led to the formation of the group. There was, for example, considerable support for an amendment by the Lords Renfrew, Redesdale and Freyberg to make Sites & Monument Records (SMRs) a statutory responsibility for local authorities — something that had been recommended in 'Protecting our Heritage' — and also for some form of action to be taken against the sale of illicit antiquities.

Another factor behind the development of the group was the concern expressed by a number of peers in the debate initiated by Lord

Montagu of Beaulieu in the House of Lords in November 2000 about the English Heritage report 'Power of Place'. That debate saw a number of concerns being raised about the proposals in relation to archaeology and archaeological policy. A final factor was the meeting at the Society of Antiquaries earlier this year, under the auspices of the IFA, when the minister Alan Howarth, Peter Ainsworth MP (Conservative Party Shadow Minister), Lord Renfrew and Lord Redesdale, representing the Liberal Democratic Party, all expressed the view, in varying degrees, in front of an audience of archaeologists representing a wide range of bodies and interests, that more needed to be done to reflect the interests of archaeology in parliament. One of the speakers drew attention to the wide and developing public interest in archaeology, as represented by, for example, the large audiences for archaeology on UK television, and suggested there was a need to focus archaeological support within parliament.

The need for promoting archaeological interests in parliament is further underlined by the fact that there seems to be no intention to reintroduce the Culture and Recreation Bill in the current session of the new parliament. The newly formed group is well aware that the government will shortly be publishing a response to 'Power of Place' and it intends to make its position heard in any subsequent debate. Amongst its aims is the encouragement of clearly thought through legislation to aid the development of archaeological activity and to safeguard the wider public interest in the Past. It appears that it will be launching a website shortly to aid it in its ambitious programme and we shall provide further information in the next issue.

 Prof. ENRICO PROCELLI (Catania) has kindly given us an account of the study day on April 3 at the Ecole française de Rome on the theme of the Neolithization of Peninsular Italy, from which we have selected some elements which allow comparison with the rest of Europe.

The lively and stimulating study day was organized by Jean Guilaine in six main themes: 1 Mesolithic and Neolithic relations; 2 territory; 3 settlement; 4 economy; 5 artefacts; 6 burial.


On the settlement theme, A. Manfredini showed that sites along the course of the Candelaro (Apulia) concentrated in wet zones.

S. Tiné suggested that most sites were farms (occupied by one or two families) rather than villages. A. Manfredini suggested that the Tavoliere villages larger than 200 m across showed the presence of several families. For northeast Italy, A. Pessina emphasized the mobility of agriculture. M.A. Fugazzola illustrated the settlement of Marmotta, the large village either on a river or on the banks of a lake, with complex rectangular huts. M. Cipolloni emphasized the preference of Tavoliere sites for both water courses and workable soils. She also stressed the compounds comprising single family huts and work areas. The preference for wet areas was confirmed in the Taranto Gulf area by M. Gorgoglione. The question of the role of ditches in soil drainage was both supported (S. Tiné and M. Cipolloni) and opposed (A. Manfredini, G. Radi), as part of a wider, lively, debate (F. Radina, G. Fiorentino, M.R. Iovino, S. Tiné, E. Procelli).

A. Cazzella addressed the neolithization of the smaller islands, recalling that they were occupied from the Mesolithic, with some exceptions (Malta, Lipari). The occupation of some islands dates to the early Neolithic but not before the peninsula, a fact that excludes the Tremiti islands as a bridge, since older occupation is found in Apulia. Cazzella pointed out the lack of securely dated deposits in the small islands. The motive for colonization included the search for raw materials and alternative settlement strategies. F. Martini recalled that the Mesolithic frequentation of the small islands (including Lipari), was shown by the presence of obsidian in contemporary deposits on Sicily, at Perriere Sottano, and in Liguria at Riparo Mochi.

On the theme of the economy, G. Fiorentino showed how in southeast Italy, between the Murge and the Tavoliere, there was great climatic diversity, demonstrated by the diversity of agriculture, comprising all cereal species from the early Neolithic. For northeast Italy, A. Pessina showed the wide distribution of agriculture from the very earliest Neolithic. A. Manfredini explained the differentiation of shellfish gathering. M.A. Fugazzola confirmed that all cereal species occurred at Marmotta, as well as hazel nuts, acorns, grape and partly domesticated opium. All the main domestic species were present, with bovines killed as adults suggesting draught usage. Food included

hunting and fishing (both fresh and salt water). To the questioning of J. Guilaine on the human impact on the terrain, G. Fiorentino replied that there was little evidence in Apulia. In the Tavoliere the landscape was considered to be open, whereas M. Cipolloni showed how in the hills there were woods suitable for bovine stock raising.

 We publish two reports conveying recent developments in radiocarbon dating. The first, by RICHARDS & BECK, centres on the profound effect changes in the dating can have on the study of early humans. The second, by AERTS *et al.*, highlights the potential of radiocarbon dating for the more difficult samples such as cremated bone.

There has been much press coverage (for example in the *Independent*) on the recent article by Beck, Richards and colleagues in *Science* which reports on significant fluctuation in the radiocarbon reservoir at a significant moment for archaeology. We have invited two advisory editors to comment on the archaeological implications.

In response to our invitation, CHRIS STRINGER writes principally about the implications for the dating of the last Neanderthal and early Palaeolithic:

‘Every archaeologist should be aware that radiocarbon years are not the same as calendar years, and calibration curves based on Holocene tree-ring records have long been available. However, calibration into the Pleistocene has been more problematic, particularly beyond 15,000 years. Several provisional correction schemes extending beyond 30,000 years have been proposed, and *Science* recently published the latest (and what is arguably the most comprehensive) of these. A summary of that work follows below. For those of us working around the Middle–Upper Palaeolithic transition, the results make very sobering reading. Some of us had assumed that radiocarbon might be underestimating real ages by perhaps 10%, but the real figures could be nearer 20% at times. This means that age estimates based around radiocarbon for the last Neanderthals, the early Upper Palaeolithic, the oldest European art, would all need to be moved back. In the example given below, the Vindija late Neanderthals from Croatia directly accelerator dated at less than 30,000 radiocarbon years could actually be older than 36,000 years.

‘However, the implied corrections are *neither simple nor linear*, even containing *some reversals*, so dates would have to be reassessed on an individual basis. It is far too early to say in detail how this will affect our view of the Middle–Upper Palaeolithic transition, although it will generally push it back in time. But it will be especially interesting to see how such changes affect the present fierce debate about the relationship between the Châtelperronian and Aurignacian. And such modifications would, of course, have comparable effects in other regions — for example in study of the African Middle–Later Stone Age transition, and the early colonization of Australasia.’

Also in response to our invitation, PAUL PETTIT comments principally on the radiocarbon issues, and relates this to dates determined at Oxford where he was involved with the radiocarbon unit:

¹⁴C dating remains the main technique employed to date two of the most major biogeographic events in human prehistory — the extinction of Neanderthals and spread of early modern humans in Eurasia. When making region-based statements about the possible contemporaneity of these two species, archaeologists make assumptions about the accuracy and precision of ¹⁴C dating. In my opinion, the relatively imprecise nature of ¹⁴C measurements in OIS3 render this technique unable to resolve the issue. The problem of inaccuracy before ~20,000 BP is well known, but Richards & Beck have demonstrated with a robust dataset that the amplitude of carbon fluctuation is far higher than previously suspected. We cannot afford to ignore this.

‘That ¹⁴C measurements considerably underestimate “true” calendrical ages in this period is well known, and would be less relevant if uncalibrated “dates” were internally consistent. But they are not. At the moment the data set is provisional, and lacks probabilistic means to assess where in a calibrated age range a real date is most likely to lie. Richards & Beck state that their provisional results should *not* be used as a calibration tool; I agree with and emphasize their caution.

‘It seems to me that the large “calibrated” age ranges for ¹⁴C measurements in this period reflect similarly coarse imprecision in the uncalibrated measurements, which are often ignored by archaeologists. I am flattered that

Richards & Beck chose to illustrate this using the two Neanderthal samples from Vindija Cave, Croatia measured at Oxford. The resulting age ranges are in the order of 4000 years. Taking errors into account the resulting uncalibrated age ranges at 2σ are over 1500 years — enough to preclude any sophisticated use of the results. That the Vindija Neanderthals were *some* of the latest the earth ever saw remains true: I would push the data no further. This having been said, it is important to stress that it is not ^{14}C pre-treatment and measurement that is at fault: a “date” is data and can be “corrected” in the future. For this reason I would stress to museum curators that the dating of precious samples from this period is still valid; no one will benefit from abandoning sampling.

‘We can only hope that as these crucial datasets increase we gain some probabilistic means of ascertaining the most likely portions of calibrated age ranges for samples. I suspect that this might eventually be employed for the Vi-207 result (OxA-8296) given that it straddles two peaks of the curve. We must also hope that developments in luminescence, U-Series and ESR will improve precision down to the levels enjoyed (if that is the right word) by ^{14}C . Until then we should heed the warning and cease to make scientifically unsupported statements about archaeological “contemporaneity”. We are too used to thinking of revolutions as a good thing; they can be drastically unsettling too.’

Dramatic shifts in atmospheric radiocarbon during the last glacial period

DAVID A. RICHARDS & J. WARREN BECK*

Introduction

Radiocarbon measurements obtained from a stalagmite from a submerged cave of the Bahamas (Beck *et al.* 2001) demonstrate that atmospheric ^{14}C concentrations during the last glacial and deglacial periods were much greater and more variable than previously believed. At times, atmospheric concentrations reached levels higher than the ‘bomb-pulse’ spike that resulted from nuclear weapons testing during the 1950s

and 1960s. Abrupt shifts in ^{14}C levels are also evident in this record, which have major implications for those requiring accurate chronological control for their studies. Interpretation of these results also presents a significant challenge to those investigating fundamental aspects of the Earth’s dynamical system during the past 50,000 years. This record seemingly requires large shifts in atmospheric ^{14}C production rate (a function of variability in the Earth’s geomagnetic field strength, solar activity, or galactic cosmic ray flux), as well as significant redistribution of ^{14}C between reservoirs of the carbon cycle.

Meticulous effort by numerous researchers has previously revealed secular variation of $\Delta^{14}\text{C}$ (effectively, the ratio of ^{14}C to stable ^{12}C relative to pre-industrial wood) by comparing radiocarbon ages with calendar ages of overlapping tree-ring sequences. For the period covered by tree-ring calibration (11,858 cal BP to present), there was a ~15% reduction of atmospheric ^{14}C concentration, principally attributed to a concomitant increase in the Earth’s magnetic field strength. Periodic short-term changes of up to 5% are superimposed upon this general decline, which give rise to the ‘wiggles’ and ‘plateaux’ identified in calibration curves. The speleothem record, however, indicates that $\Delta^{14}\text{C}$ during the last glacial period was at times greater than twice pre-industrial levels and subject to abrupt shifts of at least 70%. Clearly, major efforts are now required to confirm the structure of $\Delta^{14}\text{C}$ variation observed therein, and identify causal mechanisms.

Initial radiocarbon calibration curves relied exclusively on tree-ring records (Stuiver *et al.* 1986; 1993), but more recently extension has been enabled by coupled thermal-ionisation mass-spectrometric (TIMS) ^{230}Th and AMS ^{14}C ages of fossil corals and AMS ^{14}C ages of annually varved ocean sediments. INTCAL98 is a compilation of such data and is recognized as the international standard calibration curve (Stuiver *et al.* 1998). It extends to 15585 cal BP in detail, but beyond this it has the form of a linear extrapolation based on a very limited number of coral results. Over the past 5 years there have been a number of attempts to improve upon this situation using alternative archives such as lacustrine carbonates, speleothems (e.g. stalactites, stalagmites), terrestrial macrofossils in varved lake sediments and deep-ocean foram

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